

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT
TO OPERATE AIR EMISSIONS EQUIPMENT
THIS CERTIFIES THAT**

**Mississippi Power Company
Daniel Electric Generating Plant
Highway 63 North
Escatawpa, MS (Jackson County)**

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: JAN 18 2008

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: December 31, 2012

Permit No.: 1280-00090

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SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)
- 1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: APC-S-6, Section III.A.6.b.)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)
- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-6, Section III.A.6.e.)
- 1.6 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: APC-S-6, Section III.A.5.)
- 1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct

measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgements where such judgements are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)
 - (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)
 - (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)
- 1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)
- 1.9 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)
- 1.10 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)
- 1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))
- 1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))
- 1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)
- 1.14 Nothing in this permit shall alter or affect the following:
- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)

- 1.15 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)
- 1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)
- 1.18 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)
- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require

modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."

- 1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)
- 1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)
- 1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to

infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordinance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)

1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.

- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;

- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)
- 1.24 Excess emissions resulting from startup, shutdown, soot blowing, upsets, and maintenance are subject to the following conditions:
- (a) For purposes of this permit, startup, shutdown and upset shall be defined as follows:
- (1) *Startup* - The bringing into operation from a non-operative condition. Relative to fuel-burning equipment, a startup shall be construed to occur only when a unit is taken from a non-fired to a fired state. A startup period shall end when ignitor fuel is discontinued or when the combustion turbine control indicates that mode 6 operation has been achieved (greater than approximately 50% load).
 - (2) *Shutdown* - The termination of operation of equipment. Relative to fuel-burning equipment, a shutdown shall be construed to occur only when a unit is taken from a fired to a non-fired state. A shutdown period will commence when ignitor fuel is required to stabilize the boiler flame until all fans are turned off or when the combustion turbine control indicates below mode 6 operation.(less than approximately 50% load).
 - (3) *Upset* - An unexpected and unplanned condition of operation of the facility in which equipment operates outside of the normal and planned parameters. An upset shall not include a condition of operation caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, operator error, or an intentional startup or shutdown of equipment.
- (Ref.: APC-S-1, Section 2)
- (b) For a startup or shutdown the emissions limitation applicable to normal operation apply except as follows:
- (1) a sudden, unavoidable breakdown which occurs during startup or shutdown. This event may be classified as an upset;

- (2) the startup or shutdown is infrequent, duration of excess emissions is brief, the design of the source is such that the period of excess emissions can not be avoided without causing damage to equipment or persons, and best operational practices to minimize emissions are adhered to;
- (3) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit;
- (4) startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(Ref.: APC-S-1, Section 10.2 and Section 3.1(b))

- (c) Excess emissions resulting from soot blowing shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour for each unit.
(Ref.: APC-S-1, Section 3.1.c)

- (d) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the source demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

- (1) an upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) the source was at the time being properly operated;
- (3) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
- (4) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
- (5) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.

(Ref.: APC-S-1, Section 10.1.(a))

- (e) Excess emissions resulting from maintenance activities are subject to the following conditions:

- (1) Unavoidable maintenance which results in brief periods of excess emissions and is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action

brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:

- (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
 - (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply.

(Ref.: APC-S-1, Section 10.3)

- 1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001 (Common Stack with AA-002)	Unit #1 - 5,460.5 MMBTUH (nominal) Combustion Engineering Tangentially-Fired Utility Boiler. This boiler combusts coal (bituminous and subbituminous), #2 fuel oil, used oil, natural gas, petroleum contaminated soil, boiler cleaning waste, wood waste, and #6 fuel oil and is equipped with an electrostatic precipitator. (Ref.: Plant Daniel Unit 1)
AA-002 (Common Stack with AA-001)	Unit #2 - 5,460.5 MMBTUH (nominal) Combustion Engineering Tangentially-Fired Utility Boiler. This boiler combusts coal (bituminous and subbituminous), #2 fuel oil, used oil, natural gas, petroleum contaminated soil, boiler cleaning waste, wood waste, and #6 fuel oil and is equipped with an electrostatic precipitator. (Ref.: Plant Daniel Unit 2)
AA-003	Unit #3a - 1,946 MMBTUH (nominal) Combustion Turbine (CT). The turbine is equipped with dry, low NO _x burners and a 159 MMBTUH Coen duct burner heat recovery steam generator (HRSG). Both combustion devices burn natural gas only. The unit uses selective catalytic reduction (SCR) to control NO _x emissions. Unit 3 is a combined-cycle comprised of two CT/HRSGs that supply steam to a single steam turbine. (Ref: Plant Daniel Unit 3a)
AA-004	Unit #3b - 1,946 MMBTUH (nominal) Combustion Turbine (CT). The turbine is equipped with dry, low NO _x burners and a 159 MMBTUH Coen duct burner heat recovery steam generator (HRSG). Both combustion devices burn natural gas only. The unit uses selective catalytic reduction (SCR) to control NO _x emissions. Unit 3 is a combined-cycle comprised of two CT/HRSGs that supply steam to a single steam turbine. (Ref: Plant Daniel Unit 3b)
AA-005	Unit #4a - 1,946 MMBTUH (nominal) Combustion Turbine (CT). The turbine is equipped with dry, low NO _x burners and a 159 MMBTUH Coen duct burner heat recovery steam generator (HRSG). Both combustion devices burn natural gas only. The unit uses selective catalytic reduction (SCR) to control NO _x emissions. Unit 4 is a combined-cycle comprised of two CT/HRSGs that supply steam to a single steam turbine. (Ref: Plant Daniel Unit 4a)
AA-006	Unit #4b - 1,946 MMBTUH (nominal) Combustion Turbine (CT). The turbine is equipped with dry, low NO _x burners and a 159 MMBTUH Coen duct burner heat recovery steam generator (HRSG). Both combustion devices burn natural gas only. The unit uses selective catalytic reduction (SCR) to control NO _x emissions. Unit 4 is a combined-cycle comprised of two CT/HRSGs that supply steam to a single steam turbine. (Ref: Plant Daniel Unit 4b)
AA-007	12,000 Gallon Tractor Garage Diesel Storage Tank. (Ref.: DEGP01)
AA-008	1,000 Gallon Gasoline Storage Tank. (Ref.: DEGP02)
AA-009	3,370 Gallon Waste Oil Storage Tank. (Ref.: DEGP03)
AA-010	1,000 Gallon Tractor Garage Waste Oil Storage Tank. (Ref.: DEGP04)
AA-011	1,000 Gallon Portable Waste Oil Storage Tank. (Ref.: DEGP05)
AA-012	152,000 Gallon North #2 Fuel Oil Storage Tank. (Ref.: DEGP06)
AA-013	152,000 Gallon South #2 Fuel Oil Storage Tank. (Ref.: DEGP07)
AA-014	9,900 Gallon South Turbine Oil Storage Tank. (Ref.: DEGP08)

Emission Point	Description
AA-015	9,900 Gallon North Turbine Oil Storage Tank. (Ref.: DEGP09)
AA-016	7,000 Gallon Unit #1 Main Turbine Oil Storage Tank. (Ref.: DEGP10)
AA-017	1,153 Gallon Unit #1 Main Turbine Oil Conditioner Tank. (Ref.: DEGP11)
AA-018	7,000 Gallon Unit #2 Main Turbine Oil Storage Tank. (Ref.: DEGP12)
AA-019	1,153 Gallon Unit #2 Main Turbine Oil Conditioner Tank. (Ref.: DEGP13)
AA-020	Fugitive emissions from the conveying and crushing of coal.
AA-021	Fugitive emissions from the bulldozing and hauling, and storage (piles) of coal.
AA-022	6,000 Gallon Unit #3 Steam Turbine Oil Storage Tank. (DEGP14)
AA-023	6,000 Gallon Unit #4 Steam Turbine Oil Storage Tank. (DEGP15)
AA-024	6,200 Gallon Unit #3a Steam Turbine Oil Storage Tank. (DEGP16)
AA-025	6,200 Gallon Unit #3b Steam Turbine Oil Storage Tank. (DEGP17)
AA-026	6,200 Gallon Unit #4a Steam Turbine Oil Storage Tank. (DEGP18)
AA-027	6,200 Gallon Unit #4b Steam Turbine Oil Storage Tank. (DEGP19)
AA-028	Existing compression ignition (CI) stationary reciprocating internal combustion engine (RICE) with a rated capacity greater than 500 horsepower (hp).
AB-001	Unit #1 Ash Separator equipped with a baghouse. (United Conveyor Baghouse Model # 126-W-84)
AB-002	Unit #2 Ash Separator equipped with a baghouse. (United Conveyor Baghouse Model # 126-W-84)
AB-003	Flyash Transfer Tank Bin Vent equipped with a baghouse. (Mikropul Environmental Systems Model # 25S-10-30 TR "B")
AB-004	Active Flyash Silo Bin Vent equipped with a baghouse. (Mikropul Environmental Systems Model # 156S-10-20 TRH "B")
AB-005	Active Flyash Silo Bin Vent equipped with a baghouse. (Mikropul Environmental Systems Model # 156S-10-20 TRH "B")
AB-006	Railcar Loading Box and Sock Filter.
AB-007	Two (2) Inactive Storage Silos.

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: APC-S-1, Section 3.1)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: APC-S-1, Section 3.2)

3.A.3 No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.

(Ref.: APC-S-6, Section III.A.4.(a))

3.A.4 Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator and the DEQ. (Ref.: APC-S-6, Section III.A.1.(b))

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 AA-002	40 CFR Part 60, Subpart D, Sections 60.42 (a)(1) and (2), Section 60.43 (a)(2), and Section 60.44 (a)(3).	3.B.1	PM SO ₂ NO _x Opacity	0.1 lb/MMBtu 1.2 lb/MMBtu 0.7 lb/MMBtu ≤20%, except for one six-minute period per hour of not more than 27% and during startups, shutdowns, and malfunctions.
			Alternative Fuels (See paragraph 3.B.2)	
	Title V Operating Permit (TVOP) issued on February 4, 2000, and modified on June 27, 2003 (previously based on Operating Permits modified on September 26, 1995, and December 9, 1986).	3.B.2	Used Oil	≤ 12,000 gallons per unit each year.
			Petroleum Contaminated Soil	Fed with coal at a rate not to exceed 200 lbs/ton of coal and not to exceed a total of 300 tons per day.
			Non-Hazardous Boiler Cleaning Wastes	≤ 1,000,000 gallons per year.
			Clean Wood Products	≤ 20% percent of the total fuel usage.
AA-003 AA-004 AA-005 AA-006	TVOP issued on February 4, 2000, and modified on June 27, 2003, and Prevention of Significant Deterioration Construction Permit issued on December 31, 1998. 40 CFR Part 60 Subparts A, Db and GG.	3.B.3	PM/ PM ₁₀	0.011 lb/MMBtu, not to exceed 22.0 lb/hr and 96.36 TPY.
			NO _x	0.013 lb/MMBtu, not to exceed 27.4 lb/hr and 120 TPY. This limit equates to the BACT limit of 3.5 ppm @ 15% O ₂ .
			CO	0.057 lb/MMBtu, not to exceed 119.5 lbs/hr and 523.41 TPY.
			VOC	0.015 lb/MMBtu, not to exceed 30.3 lbs/hr and 132.71 TPY.
			Opacity	≤ 10 % (EPA Ref. Method 9)
			Fuel Restriction	Natural Gas only with a sulfur content < 0.8 % by weight. (40 CFR 60, Section 60.333(b))
			Fuel Monitoring	Custom fuel monitoring plan found in Appendix D of this permit. (40 CFR 60, Section 60.334(b)(2)).
AA-001 AA-002 AA-003 AA-004	Acid Rain Regulations 40 CFR Parts 72-78	3.B.4		See Phase II Acid Rain Permit (Appendix C)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-005 AA-006				
Facility Wide	APC-S-1, Section 3.6 (a)	1.19 3.B.5	PM	$E=4.1(p)^{0.67}$, or as otherwise limited by facility modification restrictions.
AA-003 AA-004 AA-005 AA-006	40 CFR Part 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	3.B.6	HAP	MACT applicability only. The unit is not required to meet any other requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A.
AA-028	40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	3.B.7	HAP	MACT applicability only. The unit is not required to meet any other requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A.

- 3.B.1 Emission Points AA-001 and AA-002 are subject to the New Source Performance Standards (NSPS), Subpart D, including the requirements of Section 60.42(a)(1) and (2) for particulate matter, Section 60.43(a)(2) for sulfur dioxide, and Section 60.44(a)(3) for nitrogen oxides. The permittee shall comply with the opacity standard for these units of $\leq 20\%$, except for one six-minute period per hour of not more than 27% and during startups, shutdowns, and malfunctions.
- 3.B.2 For Emission Points AA-001 and AA-002, the permittee shall meet the following conditions while burning alternative fuels:
- (a) The permittee is authorized to burn non-hazardous waste oils generated during the production, transmission, and distribution of electricity. The permittee may burn a maximum of 12,000 gallons of used oil in each unit per year.
 - (b) Petroleum contaminated soil shall be fed with coal at a rate not to exceed 200 pounds per ton of coal, and shall not exceed a total of 300 tons per day. Contaminated soils shall not be brought in from other facilities for burning. For purposes of this permit, contaminated soils shall include any clay-based petro-sorb used for the absorption of petroleum products (lube and fuel oils).
 - (c) The permittee shall burn no more than 1,000,000 gallons per year of non-hazardous boiler cleaning wastes, which is collected from routine cleaning of the boilers.
 - (d) The permittee is authorized to burn clean wood products as blends with coal with a maximum of 20% percent of the total fuel usage coming from the wood products in the fuel blend.

(Ref.: Permit to Operate modified on September 26, 1995, and December 9, 1986.)

- 3.B.3 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee shall comply with the emission limits originally established in the Prevention of Significant Deterioration (PSD) Construction Permit issued December 31, 1998. Additionally, the combustion turbines associated with these emission points are subject to the requirements of New Source Performance Standards (NSPS), Subpart GG, Standards of Performance for Stationary Gas Turbines, and the heat recovery steam generators are subject to NSPS, Subpart Db, Standards of Performance for Industrial, Commercial, and Institutional Steam Generating Units. These units are limited to burning only natural gas with a sulfur content of less than 0.8 percent by weight. The NO_x emission limits in the table above equate to the Best Available Control Technology (BACT) emission limit of 3.5 parts per million (ppm) at 15% O₂. (Ref.: PSD Construction Permit issued on December 31, 1998)
- 3.B.4 For Emission Points AA-001 through AA-006, the permittee is subject to and shall comply with all applicable requirements of the Acid Rain Program Regulations as specified in 40 CFR Parts 72-78.
- 3.B.5 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship:
- $E = 4.1 (p)^{0.67}$, where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. (Ref.: APC-S-1, Section 3.6 (a))
- 3.B.6 Emission Points AA-003, AA-004, AA-005, and AA-006 are subject to 40 CFR Part 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. These units are existing stationary combustion turbines as defined in the standard and are not required to meet any other requirements of the standard or the General Provisions, 40 CFR Part 63, Subpart A. (Ref.: 40 CFR §63.6090(b)(4))
- 3.B.7 Emission Point AA-028, the existing compression ignition (CI) stationary reciprocating internal combustion engine (RICE) with a rated capacity greater than 500 horsepower (hp) is subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This unit is considered an existing CI stationary RICE unit as defined in the standard and is not required to meet any other requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A. (Ref.: 40 CFR §63.6590(b)(3))

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1	PM	0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions.
APC-S-1, Section 4.1(a)	3.C.2	SO ₂	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions.
APC-S-1, Section 3.6 (a)	3.C.3	PM	$E=4.1(p)^{0.67}$, or as otherwise limited by facility modification restrictions.

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.
- 3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.
- 3.C.3 The permittee shall not cause, permit or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship:

$$E=4.1(p)^{0.67}$$

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour.

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by March 1st for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)
- 4.3 For each calendar year that an affected unit is subject to the Acid Rain Program, the permittee shall submit an annual compliance certification report within sixty (60) days after the end of the calendar year. The contents of the report shall be in accordance with 40 CFR Part 72.90(b).
- 4.4 Except as otherwise specified herein, compliance with the opacity limits shall be determined using EPA Reference Method 9, or other approved methodology.
- 4.5 For Emission Points AA-001 and AA-002, the permittee is subject to the requirements of APC-S-1, Section 8.4 and the Clean Air Mercury Rule (CAMR) as set forth in 40 CFR Part 60, Subpart HHHH – Emission Guidelines for the control of Mercury Emissions from Coal-Fired Electric Steam Generating Units.

The permittee must comply with all of the standard requirements specified in §60.4106 and permit requirements specified in §60.4120 through §60.4124. The Mercury (Hg) designated representative shall submit a complete Hg budget permit application under §60.4122 at least 18 months before January 1, 2010 (or such lesser time provided by the permitting authority). The permittee shall also comply with all monitoring and reporting requirements as specified in §60.4170 through §60.4176. (Ref.: APC-S-1, Section 8.4 and 40 CFR Part 60, Subpart HHHH)

- 4.6 For Emission Points AA-001 through AA-006, the permittee is subject to the requirements of APC-S-1, Section 14.1 and the Clean Air Interstate Rule (CAIR) as set forth in 40 CFR 51.123, 40 CFR 51.124, 40 CFR 96.102 through 40 CFR 96.388.

Regarding the CAIR *NO_x Annual Trading Program*, the permittee must comply with all of the standard requirements specified in §96.106 and permit requirements specified in §96.120 through §96.124. The CAIR designated representative shall submit a complete CAIR permit application under §96.122 before July 1, 2008. The permittee shall also comply with all monitoring and reporting requirements as specified in §96.170 through §96.175.

Regarding the CAIR *SO₂ Annual Trading Program*, the permittee must comply with all of the standard requirements specified in §96.206 and permit requirements specified in §96.220 through §96.224. The CAIR designated representative shall submit a complete CAIR permit application under §96.222 before July 1, 2008. The permittee shall also comply with all monitoring and reporting requirements as specified in §96.270 through §96.275.

Regarding the CAIR *NO_x Ozone Season Trading Program*, the permittee must comply with all of the standard requirements specified in §96.306 and permit requirements specified in §96.320 through §96.324. The CAIR designated representative shall submit a complete CAIR permit application under §96.322 before July 1, 2008. The permittee shall also comply with all monitoring and reporting requirements as specified in §96.370 through §96.375.

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 5.A.3 Except as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration, maintenance, and monitoring records and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. For the purposes of this permit, deviations from the opacity standard shall be determined using EPA Reference Method 9. (Ref.: APC-S-6, Section III.A.3.c.(2))

- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: TVOP Section 1.19)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001 AA-002	Fuel Usage	Monitoring and Recordkeeping	5.B.1	Operating Permits modified on September 26, 1995, and December 9, 1986). APC-S-6, Section III.A.3
	Opacity SO ₂ NO _x O ₂ /CO ₂	Monitoring, Recordkeeping, and Testing	5.B.2	40 CFR Part 60, Subpart D, §60.45(a)
	PM/PM ₁₀	Monitoring and Testing	5.B.3	APC-S-6, Section III.A.3
	PM/PM ₁₀	CAM Plan Requirements	5.B.4	40 CFR 64
	SO ₂ NO _x O ₂ /CO ₂ Opacity Flow	Monitoring, Recordkeeping, and Testing	5.B.5 5.B.6	40 CFR Part 75
AA-003 AA-004 AA-005 AA-006	NO _x O ₂ /CO ₂	Monitoring, Recordkeeping, and Testing	5.B.5 5.B.10	40 CFR Part 75
	Fuel Monitoring	Monitoring and Recordkeeping	5.B.7	Prevention of Significant Deterioration (PSD) Construction Permit issued on December 31, 1998. 40 CFR Part 60, Subpart Db 40 CFR Part 60, Subpart GG
	NO _x	Monitoring, Recordkeeping, and Testing	5.B.8 5.B.9 5.B.10	40 CFR Part 60, Subpart Db 40 CFR Part 60, Subpart GG
	PM/PM ₁₀ CO VOC	Emissions Testing	5.B.11	PSD Permit issued on December 31, 1998.
	Opacity	Monitoring and Recordkeeping	5.B.12	APC-S-6, Section III.A.3
AB-001 through AB-007	PM/PM ₁₀ Opacity	Monitoring and Recordkeeping	5.B.12 5.B.13	APC-S-6, Section III.A.3

- 5.B.1 For Emission Points AA-001 and AA-002, the permittee shall keep monthly records of all fuels burned. These records shall consist of fuel type, quantity, the sulfur content (% by weight), and the heating value.

The permittee shall also record and maintain the following information:

- (a) Each time used oil is burned, the permittee shall perform a chemical analysis of the used oil and shall record the total amount of used oil fed to the boiler.
 - (b) The coal quality information shall be determined from vendor's data or by self-analysis. This information should include the percent sulfur, percent ash, heating value and approximate tonnage received for each shipment of coal. The permittee is not required to supply such information for each individual car, barge, etc.; however, the information shall be supplied for each vendor's coal and for each shipment that the coal quality changes.
 - (c) The usage rate of wood materials that are blended with coal as fuel.
 - (d) The total quantity of petroleum contaminated soil burned in any given day and the feed rate of petroleum contaminated soil per ton of coal.
 - (e) The total quantity of boiler cleaning wastes burned.
- 5.B.2 For Emission Points AA-001 and AA-002, the permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (e.g., COMS, CEMS) for the purpose of measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide, unless complying with another standard or requirement meets the requirements of this standard. (Ref.: §60.13 and §60.45(a))
- 5.B.3 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with the particulate matter emission limits by performing a stack test biennially using EPA Reference Methods 1-5, or approved equivalents. Stack testing shall be performed under normal operating conditions and while operating at or near capacity. The initial stack test shall be performed within eighteen (18) months of the permit issuance date (e.g., June 30, 2009), and then tests shall be conducted biennially thereafter by December 31st of the respective year (e.g., December 31, 2011 and December 31, 2013).

The permittee shall submit a pre-test protocol to be approved by the Mississippi Department of Environmental Quality (MDEQ) within thirty (30) days of stack test performance. The permittee must also notify the MDEQ within thirty (30) days prior to the scheduled test date(s) so that an observer may be scheduled to witness the test(s). The results of the performance testing shall be submitted to the MDEQ within sixty (60) days of the stack test event. (Ref.: APC-S-6, Section III.A.3)

- 5.B.4 For Emission Points AA-001 and AA-002, the permittee shall conduct monitoring and fulfill all other obligations specified in 40 CFR Parts 64.7 through 64.9. The permittee shall comply with the CAM plan contained in Appendix E and summarized in the table below. For each excursion, the permittee shall document the event and the corrective actions taken.

CAM Plan for Emission Points AA-001 and AA-002.
Electrostatic Precipitators for Particulate Matter Control

Indicator	Opacity of the Electrostatic Precipitator (ESP) exhaust.
Measurement Approach	Continuous Opacity Monitoring System (COMS) in the ESP exhaust duct.
Indicator Range	The corrective action opacity trigger level is a 3-hour opacity greater than or equal to 18%. If the 3-hour opacity is outside the corrective action trigger level, action will immediately be taken to lower the opacity. An excursion occurs if the 3-hour opacity is greater than 20%.
Data Representativeness	The COMS was installed at a representative location in the ESP exhaust per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).
Verification of Operational Status	Results of initial COMS performance evaluation conducted per PS-1.
QA/QC Practices and Criteria	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and a quarterly filter audit is performed.
Monitoring Frequency	The opacity of the ESP outlet duct is monitored with a continuous opacity monitor.
Data Collection Procedures	The Data Acquisition System (DAS) retains 6-minute and hourly average opacity data.
Averaging Period	The 6-minute opacity data is used to calculate 3-hour block averages.
QIP Threshold	Excursions for a period of time exceeding five (5) percent of the duration of the operating time for AA-001 or AA-002 in a semi-annual reporting period.

- 5.B.5 For Emission Points AA-001 through AA-006, the permittee shall monitor and record emissions (e.g., CEMS) in accordance with 40 CFR Part 75. The permittee shall maintain all measurements, monitoring data, and other information required in 40 CFR Part 75 (e.g., §75.10-18, 20-57, etc.) for each affected unit for a period of three (3) years.
- 5.B.6 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with the sulfur dioxide and nitrogen oxides emission limits continuously by monitoring the parameters and maintaining the CEMS in accordance with 40 CFR Part 75. The annual Relative Accuracy Test Audit (RATA) shall be conducted and submitted in accordance with the requirements of 40 CFR Part 75. (Ref.: 40 CFR 75)

- 5.B.7 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee shall monitor, record, and maintain the fuel combusted each day, and the sulfur content of the fuel being fired in accordance with the approved custom fuel monitoring plan found in Appendix D of this permit. (Re.: 40 CFR Part 60, Subpart Db, §60.49b(d) and Subpart GG, §60.334(b))
- 5.B.8 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee is subject to the nitrogen oxides standard under §60.44b, which requires the permittee to install, calibrate, maintain, and operate a CEMS and record the output of the system for measuring nitrogen oxides emissions discharged to the atmosphere. However, since the permittee has installed a nitrogen oxides CEMS to meet the requirements of 40 CFR Part 75, that CEMS may be used to meet these requirements, except that the permittee shall also meet the requirements of §60.49b.

The data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in Part 75, Subpart D, nor shall the data have been bias adjusted according to the procedures of Part 75. (Ref.: §60.48b(b)(2))

- 5.B.9 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee is subject to the nitrogen oxides standard under §60.332 - 334. Since the permittee has installed a CEMS to meet the requirements of 40 CFR Part 75, the CEMS shall be used to meet these requirements, except that the missing data substitution methodology provided for in 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data shall be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c). (Ref.: §60.334(b)-(c))
- 5.B.10 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee shall install, calibrate, maintain, and operate a continuous monitor for the purpose of monitoring nitrogen oxide emissions (per 40 CFR Part 75). The permittee shall monitor and record the actual measured NO_x in ppm to calculate lb/MMBtu and lb/hr levels. The permittee is assumed to be meeting the BACT limit of 3.5 ppm at 15% O₂ (per results from Equation 19-1 of 40 CFR Part 60, Reference Method 19) when the units are operating below the emission limits established in the permit. (Ref.: PSD Permit issued December 31, 1998 and 40 CFR 75)
- 5.B.11 For Emission Points AA-003 through AA-006, the permittee shall demonstrate compliance with the particulate matter (PM), carbon monoxide (CO), and volatile organic compound (VOC) emission limits by performing a stack test(s) biennially in accordance with EPA Reference Methods 1-5, 10, and 25, respectively, or an approved equivalent. Stack testing shall be performed under normal operating conditions and while operating at or near capacity. The initial stack test shall be performed within eighteen (18) months of the permit issuance date (e.g., June 30, 2009), and then tests shall be conducted biennially thereafter by December 31st of the respective year (e.g., December 31, 2011 and December 31, 2013).

The permittee shall submit a pre-test protocol to be approved by the MDEQ within thirty (30) days of stack test performance. The permittee must also notify the MDEQ within thirty (30) days prior to the scheduled test date(s) so that an observer may be scheduled to witness the test(s). The results of the performance testing shall be submitted to the MDEQ within sixty (60) days of the stack test event. (Ref.: APC-S-6, Section III.A.3)

- 5.B.12 For Emission Points AB-001 through AB-007, the permittee shall perform visible emission observations (similar to EPA Reference Method 22) for each non-fugitive emission point on a weekly basis. If during the visible emission observation any visible emissions are observed, the permittee shall perform an EPA Reference Method 9 Visible Emission Evaluation (VEE). The permittee shall record the results of the visual observations and visible emission evaluations.

If after performing the visual observations for six (6) consecutive weeks no visible emissions are noted, the frequency of these observations shall be reduced to once per month. Whenever the monthly observations result in visible emissions, the permittee shall conduct a VEE and return to performing the visual observations weekly until no emissions are noted for six (6) consecutive weeks. (Ref.: APC-S-6, Section III.A.3)

- 5.B.13 For Emission Points AB-001 through AB-005, the permittee shall perform monthly inspections to assure that each baghouse is properly maintained and operating efficiently. The permittee shall keep records of each inspection. The inspection shall include the condition of the bags, the pressure drop reading, and documentation of any maintenance that has been performed or that is necessary. (Ref.: APC-S-6, Section III.A.3)

C. Specific Reporting Requirements

- 5.C.1 For Emission Points AA-001 and AA-002, the permittee shall submit a quarterly fuel usage report containing a summary of the information required in Permit Condition 5.B.1.
- 5.C.2 For Emission Points AA-003 through AA-006, the permittee shall submit a quarterly fuel usage report containing a summary of the information required in Permit Condition 5.B.7.
- 5.C.3 For Emission Points AA-001 and AA-002, the permittee shall submit a quarterly opacity, sulfur dioxide, and nitrogen oxides excess emissions and monitoring system report postmarked by the 30th day following the end of each calendar quarter identifying any excess emissions and monitor downtime that occurred during the calendar quarter.

For opacity, excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except for one (1) six-minute average per hour of up to 27 percent opacity. Excess emissions do not include startup, shutdown, and malfunctions.

For sulfur dioxide, excess emissions are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard described in 40 CFR Part 60, Section 60.43 and Permit Condition 3.B.1 (not to include biased or substituted data).

For nitrogen oxides, excess emissions are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of nitrogen oxides as measured by a continuous monitoring system exceed the applicable standard described in 40 CFR Part 60, Section 60.44 and Permit Condition 3.B.1 (not to include biased or substituted data).

(Ref.: 40 CFR Part 60, Section 60.45(g))

- 5.C.4 For Emission Points AA-001 through AA-006, the permittee shall submit an annual report to the Administrator in accordance with the terms outlined in Permit Condition 4.3 and 40 CFR Part 72.90(b).
- 5.C.5 For Emission Points AA-001 through AA-006, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to obtain approval for test methods and procedures. Also, the permittee shall notify MDEQ in writing at least thirty (30) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test(s).

After the first successful submittal of a written test protocol in conjunction with the initial compliance test(s), the permittee may request that the resubmittal of testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

The permittee shall submit test reports within sixty (60) days of stack test or within thirty (30) days after the end of the quarter in which the testing occurs (e.g., RATA).

- 5.C.6 For Emission Points AB-001 through AB-007, the permittee shall submit a report in accordance with Permit Condition 5.A.4 summarizing the data collected from the visual observations and/or periodic inspections required in Permit Conditions 5.B.12 and 5.B.13 and performed during the previous six-month period.
- 5.C.7 For Emission Points AA-003, AA-004, AA-005, and AA-006, the permittee shall submit a quarterly nitrogen oxides excess emission and monitoring system report postmarked by the 30th day following the end of each calendar quarter identifying any excess emissions and monitor downtime that occurred during the calendar quarter. (Ref.: 40 CFR Part 60, Section 60.49b(i))

- 5.C.8 For Emission Points AA-001 and AA-002, the permittee shall submit semi-annual reports summarizing the CAM requirements (see Permit Condition 5.B.4 and Appendix E) in accordance with Permit Condition 5.A.4, including each excursion and the associated corrective actions taken. Additionally, in accordance with 40 CFR 64, the permittee shall submit a Quality Improvement Plan (QIP) if there are excursions for a period of time exceeding five (5) percent of the duration of the operating time for AA-001 or AA-002 during a semi-annual reporting period. (Ref.: 40 CFR Part 64)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act. The full text of the referenced regulations is contained in Appendix B to this permit.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to § 82.106.
 - (b) The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - (d) No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to § 82.166. ("MVAC - like appliance" is defined at § 82.152.)
 - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - (f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §

82.166.

- 7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

SECTION 8. ACID RAIN

- 8.1 The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as Appendix C of this permit. All conditions of the Phase II Acid Rain Permit are effective from *issuance date* through the *expiration date of this permit*; however, these conditions may be revised by the MDEQ during the permitted period.

APPENDIX A

List of Abbreviations Used In this Permit

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
APC-S-7	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 Φm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

40 CFR 82

PROTECTION OF STRATOSPHERIC OZONE

APPENDIX C

PHASE II ACID RAIN PERMIT

PHASE II ACID RAIN PERMIT

Issued to: Mississippi Power Company - Plant Victor J. Daniel
Operated by: Mississippi Power Company
ORIS code: 6073
Effective: January 1, 2008 to December 31, 2012

Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the DEQ. This is the initial permitting action being undertaken:

- | | |
|---|-------------------|
| 1) Draft permit for public and EPA comment. | October 24, 1997 |
| 2) Final Permit Issued. | December 30, 1997 |
| 3) Permit revised to include the draft nitrogen oxides averaging plan for Units 1 and 2; issued for public comment. | November 6, 1998 |
| 4) Modified permit finalized and issued. | December 29, 1998 |
| 5) Permit revised to include the new combustion turbines and revised nitrogen oxides averaging plan; issued for public comment. | October 8, 1999 |
| 6) Final modified permit issued. | January 31, 2000 |
| 7) Permit revised to include the revised nitrogen oxides averaging plan for Units 1 and 2; issued for public comment. | May 7, 2004 |
| 8) Draft modified permit for EPA comment. | June 11, 2004 |
| 9) Final modified permit issued. | August 2, 2004 |
| 10) Draft renewal permit for public and EPA review. | November 2, 2007 |

Present Action:

- | | |
|--------------------------|------------------|
| 11) Final permit issued. | January 18, 2008 |
|--------------------------|------------------|

Signature

Date

01/18/08

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PHASE II ACID RAIN PERMIT

Issued to: Mississippi Power Company - Plant Victor J. Daniel
Operated by: Mississippi Power Company
ORIS code: 6073
Effective: January 1, 2008 to December 31, 2012

ACID RAIN PERMIT CONTENTS:

- 1) Statement of Basis.**
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.**
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.**
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.**

1) STATEMENT OF BASIS:

Statutory and Regulatory Authorities: In accordance with the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. §§ 49-17-1 through 49-17-43, and any subsequent amendments, and Titles IV and V of the Clean Air Act, the Mississippi Department of Environmental Quality issues this permit pursuant to the State of Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, Regulation APC-S-6, and the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act, Regulation APC-S-7.

2) **SO₂ ALLOWANCE ALLOCATIONS AND NO_x REQUIREMENTS FOR EACH AFFECTED UNIT:**

		2008	2009	2010	2011	2012
Unit 1	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	11,225*	11,225*	9,916*	9,916*	9,916*
	NO _x limit	<p>Pursuant to 40 CFR 76.11, the Mississippi Department of Environmental Quality approves a NO_x emissions averaging plan for this unit, effective from calendar years 2008 through 2012. Under the plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.33 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 30,626,415 MMBtu.</p> <p>Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11 (d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Alabama Department of Environmental Management, Jefferson County, Alabama, Florida Department of Environmental Protection, and the Georgia Department of Natural Resources Environmental Protection Division have also approved this plan.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

		2008	2009	2010	2011	2012
Unit 2	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	14,273*	14,273*	14,303*	14,303*	14,303*
	NO _x limit	<p>Pursuant to 40 CFR 76.11, the Mississippi Department of Environmental Quality approves a NO_x emissions averaging plan for this unit, effective from calendar years 2008 through 2012. Under the plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.33 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 40,588,498 MMBtu.</p> <p>Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11 (d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Alabama Department of Environmental Management, Jefferson County, Alabama, Florida Department of Environmental Protection, and the Georgia Department of Natural Resources Environmental Protection Division have also approved this plan.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

		2008	2009	2010	2011	2012
Unit AA-003A Unit AA-003B Unit AA-004A Unit AA-004B	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	N/A	N/A	N/A	N/A	N/A
	NO _x limit	N/A				

* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a revision to 40 CFR Part 73, Tables 2, 3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

3) COMMENTS, NOTES AND JUSTIFICATIONS:

Units AA-003A, AA-003B, AA-004A, and AA-004B are natural gas fired combined cycle combustion turbines; therefore, the affected units are not subject to the NO_x requirements outlined in 40 CFR Part 76. Additionally, these are new units that were not listed in 40 CFR Part 73, Tables 2, 3, or 4, and have not been allocated any SO₂ allowances. As a reference, these units are identified as AA-003, AA-004, AA-005 and AA-006 in Section 2 of the Title V Operating Permit.

4) PHASE II PERMIT APPLICATION, NO_x COMPLIANCE PLAN, AND NO_x AVERAGING PLAN: Attached

APPENDIX D

CUSTOM FUEL MONITORING PLAN

APPENDIX E

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN